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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/789,069	02/27/2004	Joachim Feld	2003P00335US	9170

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SIEMENS CORPORATION  
INTELLECTUAL PROPERTY DEPT.  
170 WOOD AVENUE SOUTH  
ISELIN, NJ 08830

EXAMINER
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WEIDNER, TIMOTHY J

ART UNIT	PAPER NUMBER
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2419

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/789,069	<b>Applicant(s)</b> FELD ET AL.	
	<b>Examiner</b> Timothy J. Weidner	<b>Art Unit</b> 2419	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 11 November 2008.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Response to Amendment***

Claims 1 and 4 are currently amended.

Claims 19 and 20 are new.

Claims 1-20 are pending.

### ***Response to Arguments***

In response to applicant's arguments/amendments filed November 11, 2008:

Applicant's arguments/amendments, see page 5, lines 3-14, with respect to rejections under 35 USC 112 have been fully considered but they are not persuasive. Applicant's amendment of claim 1 appears insufficient because it is unclear throughout the claim whether a plurality of data telegrams, or a singular data telegram are defined. For example, claim 1, line 2 specifies "data telegrams having a beginning and an end," and line 6 specifies "the end of a data telegram" which if tied together for antecedent basis leaves unclear whether to address the limitations as plural or singular data telegram(s). Further, the arguments/amendments do not address the same issue contained in claims 6 and 10. Therefore, the rejections are maintained.

Applicant's arguments, see page 5, line 15 through page 6, line 15, with respect to rejections under 35 USC 103 have been fully considered but they are not persuasive. Applicant appears to have misunderstood the rationale for applying the new rejection. While applicant acknowledges the reference to page 10, last paragraph, of the appeal brief, applicant appears to have responded to the second-to-last paragraph. For clarification, page 10, last paragraph continues onto page 11, and refers to whether the

Art Unit: 2419

Shaffer reference teaches multiple data telegrams sent in a phase. Examiner withdrew the rejection because Shaffer does not appear to teach this, so the new Lee reference was used in combination with Shaffer in a written rejection. Further, the portions of Shaffer relied upon were expanded, clarified, and explained in the written rejection to address the arguments presented in the appeal brief.

### ***Claim Objections***

Claims 1-20 are objected to because of the following informalities:

Claim 1, line 4 contains irregular spacing between "users" and "to".

Claim 6, line 2 contains "and/or" which is currently treated as or, but should be changed to "or" to remove any inconsistencies.

Claim 6, lines 2-3 contain inconsistent terminology by referring to "data telegrams" and "the telegrams" while the same phrase should be used throughout.

Claim 6, line 6 contains irregular spacing between "end of a" and "data telegram".

Claim 10, line 1 contains irregular spacing between "A" and "switchable".

Claim 10, line 2 contains "and/or" which is currently treated as or, but should be changed to "or" to remove any inconsistencies.

Claim 10, lines 2-3 contain inconsistent terminology by referring to "data telegrams" and "the telegrams" while the same phrase should be used throughout.

Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The claims are generally narrative and indefinite, failing to conform with current U.S. practice. They appear to be a literal translation into English from a foreign document and are replete with grammatical and idiomatic errors.

Claim 1, for example, recites "data telegrams having a beginning and an end" in line 2, and further recites "a defined receive time of the end of a data telegram" in lines 5-6. It is unclear what "end" is referring to, whether the end of any particular data telegram within the multiple data telegrams, or the end of a stream of multiple data telegrams. Further, the expression "data telegram" is one practically never used that can be more clearly expressed as "packet".

Claims 6 and 10 contain similar errors and lack of clarity.

Claims 2-5, 7-9, and 11-20 fail to resolve these deficiencies.

### ***Claim Rejections - 35 USC § 103***

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shaffer et al. (US 5960001) in view of Lee et al. (US 6611886 B1).

Regarding claims 1, 6, and 10, Shaffer teaches a method, system, and usable portion of a switchable data network for transmitting data in a switchable data network, comprising users having mechanisms for sending, receiving, and/or forwarding data

Art Unit: 2419

telegrams (figure 2, item 112; column 5, lines 54-67), during cyclical transmission intervals (column 3, lines 25-26; particular periodic rate) wherein the telegrams having a beginning and an end (column 4, lines 5-10; "beginning ... fixed length") and wherein the telegrams are assigned priorities (column 2, lines 11-16; "isochronous ... non-isochronous"), wherein a first usable portion is used during a first phase for sending data telegrams assigned a first priority from a first user to a second user (column 4, lines 59-59; "isochronous transmissions are occurring"), with the first phase having a pre-defined receive time for receipt of the end of the respective data telegram assigned the first priority at the second user (columns 4-5, lines 59-10; "isochronous transmission on the bus has just terminated ... backoff window will be automatically extended to the end of the isochronous transmission ... backoff period may be added to the end of the isochronous transmission ... reset upon expiration of the isochronous window").

However, Shaffer may not explicitly teach sending multiple data telegrams in a phase. Lee, which is in the same field of endeavor, teaches multiple packets sent in a single phase (column 9, lines 33-34) for the purpose of for the purpose of utilizing residual bandwidth (column 4, lines 33-37). It would have been obvious to one of ordinary skill in the art at the time the invention was made send multiple data telegrams in a phase to utilize residual bandwidth.

Regarding claims 2 and 7, Shaffer teaches the first users are provided during a second phase after the end of the first phase for exclusively sending data telegrams (column 4, lines 49-67; column 5, lines 1-10) assigned a second priority (column 2, lines 11-16) to the second users.

Art Unit: 2419

Regarding claims 3, 8, 11, and 17, Shaffer teaches a first phase and a second phase (column 4, lines 49-67; column 5, lines 1-10), but may not explicitly teach the first users are provided during a third phase after the end of the second phase for sending data telegrams assigned any priority to the second users.

Lee teaches a third priority phase after a first and second phase (column 9, lines 31-33; isochronous, variable isochronous, and asynchronous phases) for the purpose of utilizing residual bandwidth (column 4, lines 33-37). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have a third phase after a first and second phase to utilize residual bandwidth.

Regarding claims 4 and 12, Shaffer teaches the first phase is cyclically repeated (column 3, lines 14-26), the first phase having an end time based on a defined receive time of the end of a data telegram by a second user (columns 4-5, lines 59-10; “isochronous transmission on the bus has just terminated ... backoff window will be automatically extended to the end of the isochronous transmission ... backoff period may be added to the end of the isochronous transmission ... reset upon expiration of the isochronous window”).

Regarding claims 5, 9, 14-16, and 18, Shaffer teaches the system for transmitting realtime data is provided in the switchable data network, with the realtime data telegrams being assigned the first priority (column 1, lines 50-59; column 2, lines 11-16).

Regarding claim 13, Shaffer teaches the first phase is cyclically repeated (column 3, lines 14-26).

Regarding claim 19, Schaffer teaches the end time of the first phase is based on the length of the data telegram (columns 3 and 4, lines 1-12 and 5-10 respectively).

Claims 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Shaffer et al. (US 5960001) in view of Lee et al. (US 6611886 B1) as applied to claim 19 above, and further in view of Peterson (US 6301262).

Regarding claim 20, Shaffer and Lee may not explicitly teach the end time is based on a routing time so that the end time differs among users. Peterson, which is in the same field of endeavor, teaches transmission cycles with an end time based on a routing time so that the end time differs among users (column 8, lines 29-42) for the purpose of solving the problem of propagation time due to distance between communications resources (column 2, lines 6-18). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have wherein for at least one cycle the end time of the first phase for each user is also based on routing time to each user receiving a data telegram of the first priority so that the end time of the first phase in the at least one cycle differs among users receiving data telegrams based on routing times to account for the problem of propagation time due to distance between communications resources.

### ***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within



Art Unit: 2419

TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Timothy J. Weidner whose telephone number is (571) 270-1825. The examiner can normally be reached on Monday - Friday, 8:00 AM - 5:00 PM, EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edan Orgad can be reached on (571) 272-7884. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Application/Control Number: 10/789,069

Page 9

Art Unit: 2419

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Examiner, Art Unit 2419

/JAYANTI K PATEL/  
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